

Application No. 10/036,469

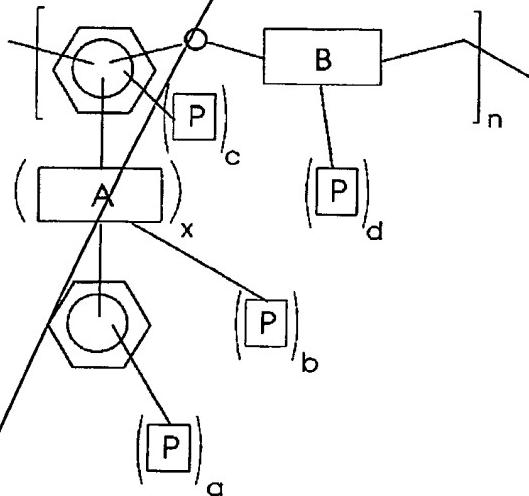
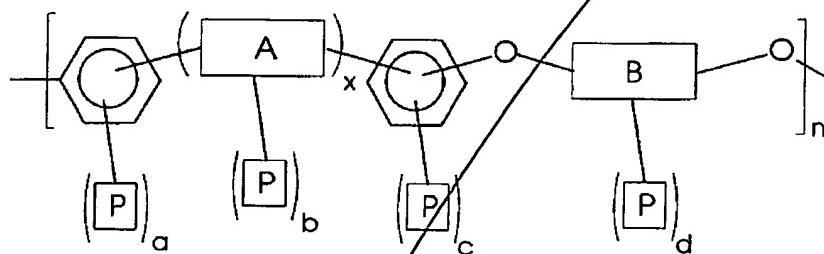
IN THE CLAIMS:

Please substitute amended claim 16 for pending claim 16 as follows:

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B

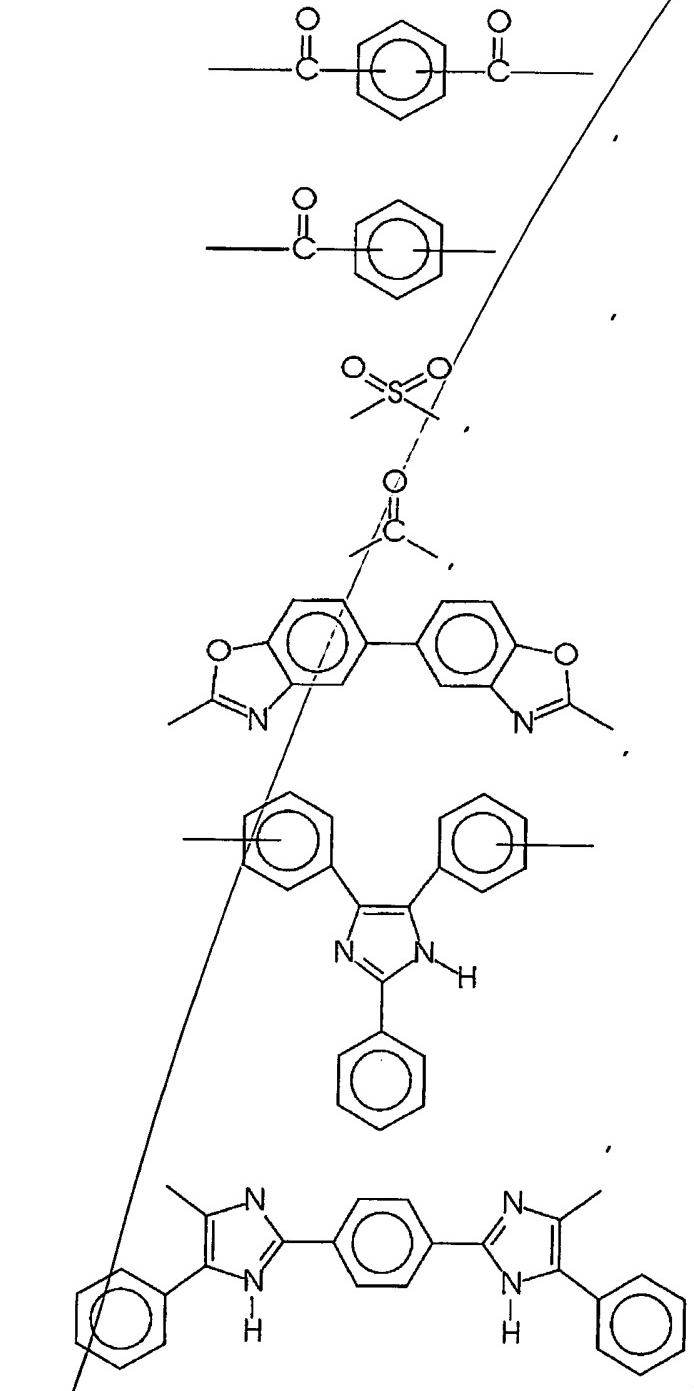
16. (Amended) A crosslinked or chain extended polymer formed by crosslinking or chain extending a precursor polymer of the formula

GwC
or

wherein x is an integer of 0 or 1, P is a functional group which imparts photosensitivity to the precursor polymer, a, b, c, and d are each integers of 0, 1, 2, 3, or 4, provided that at least one of a, b, c, and d is equal to or greater than 1 in at least some of the monomer repeat units of the precursor polymer. A is

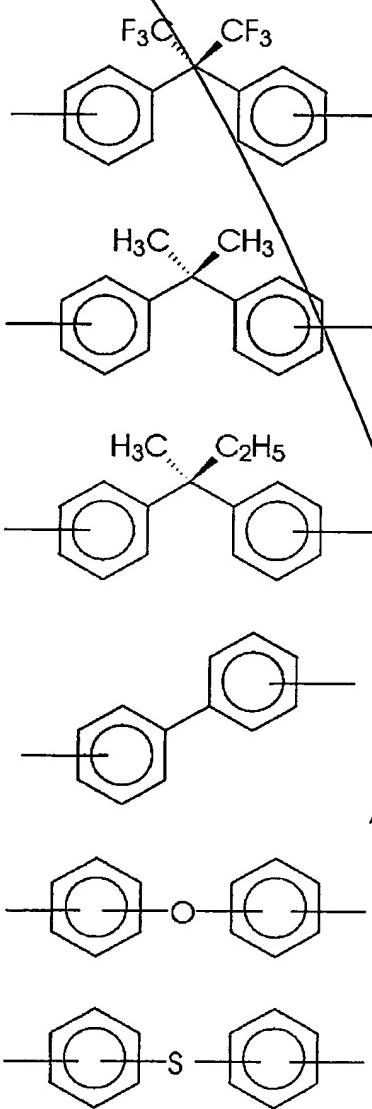
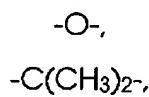
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b
c

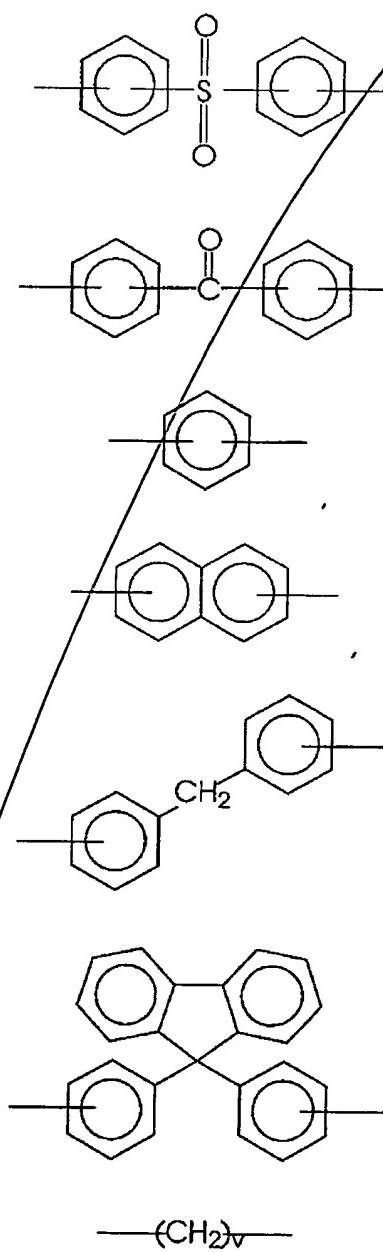


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or mixtures thereof, B is



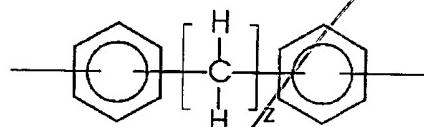
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1
S
C

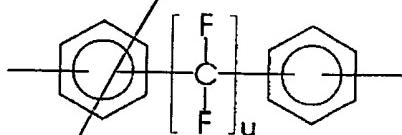
wherein v is an integer of from 1 to about 20,

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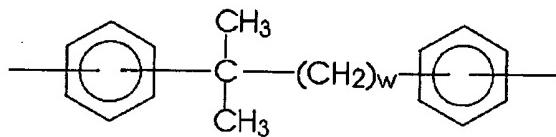
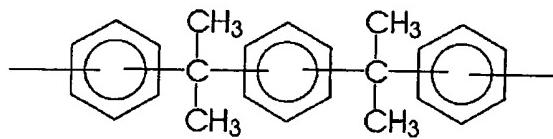
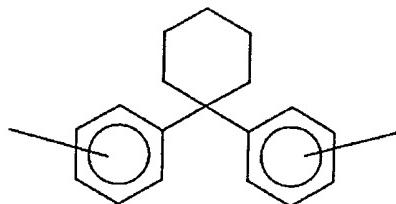
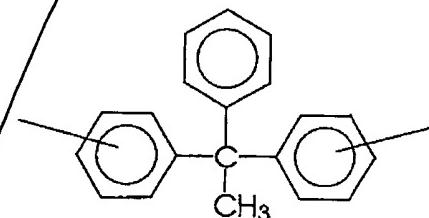
B
1
C



wherein z is an integer of from 2 to about 20,

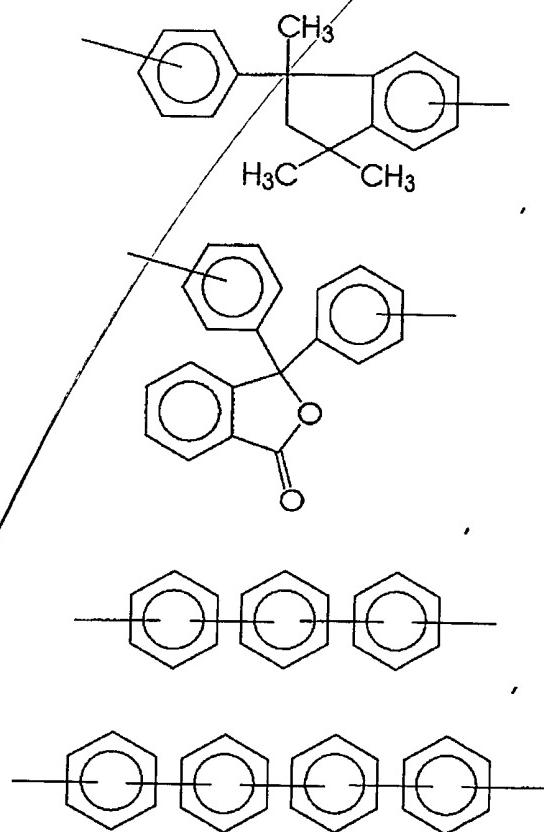


wherein u is an integer of from 1 to about 20,



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wherein w is an integer of from 1 to about 20,



or mixtures thereof, and n is an integer representing the number of repeating monomer units, said crosslinking or chain extension occurring through linking groups formed by a reaction between epoxy groups contained on at least some of the monomer repeat units of the precursor polymer and an amine curing agent, wherein the photosensitivity-imparting substituents "P" are allyl ether groups, epoxy groups, or mixtures thereof.

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Please add the following new claims:

57. (New) A polymer according to claim 16 wherein the value of n is such that the weight average molecular weight of the precursor polymer prior to crosslinking or chain extension is from about 1,000 to about 100,000.

58. (New) A polymer according to claim 16 wherein the value of n is such that the weight average molecular weight of the precursor polymer prior to crosslinking or chain extension is from about 1,000 to about 65,000.

59. (New) A polymer according to claim 16 wherein the value of n is such that the weight average molecular weight of the precursor polymer prior to crosslinking or chain extension is from about 1,000 to about 40,000.

60. (New) A polymer according to claim 16 wherein the value of n is such that the weight average molecular weight of the precursor polymer prior to crosslinking or chain extension is from about 3,000 to about 25,000.

61. (New) A polymer according to claim 16 wherein n is an integer of from about 2 to about 70.

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62. (New) A polymer according to claim 16 wherein n is an integer of from about 5 to about 70.

B
C
D

63. (New) A polymer according to claim 16 wherein n is an integer of from about 8 to about 50.

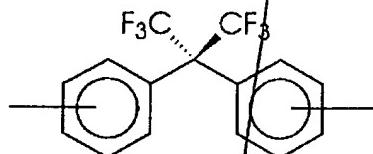
64. (New) A polymer according to claim 16 wherein the precursor polymer has a degree of substitution of on average from about 0.5 to about 2 photosensitivity-imparting groups per monomer repeat unit.

65. (New) A polymer according to claim 16 wherein the precursor polymer has a degree of substitution of on average from about 0.5 to about 1.5 photosensitivity-imparting groups per monomer repeat unit.

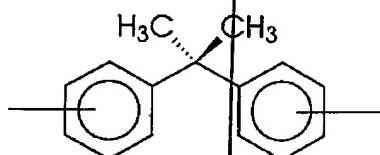
66. (New) A polymer according to claim 16 wherein the precursor polymer has a degree of substitution of from about 0.8 to about 1.8 milliequivalents of allyl ether or epoxy groups per gram of precursor polymer.

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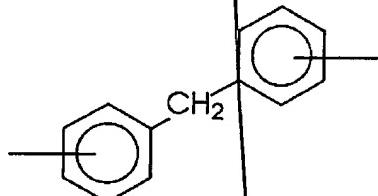
67. (New) A polymer according to claim 33 wherein B
is



68. (New) A polymer according to claim 33 wherein B
is



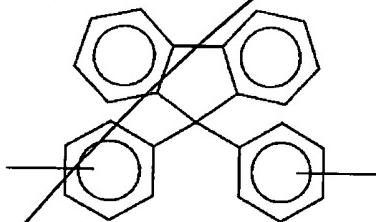
69. (New) A polymer according to claim 33 wherein B
is



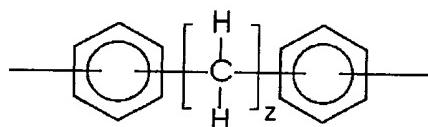
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b
P
C
y

70. (New) A polymer according to claim 33 wherein B
is



71. (New) A polymer according to claim 33 wherein B
is



wherein z is an integer of from 2 to about 20.